

biological sciences, are based, is supported by the Department of Energy. Harold Varmus, Nobel Laureate and former director of the NIH, summed up very nicely the unique relationship between the medical and physical sciences in an editorial in the Washington Post.

He stated in that editorial:

Medical science can visualize the inner workings of the body. . . . These techniques are the workhorses of medical diagnosis. And not a single one of them could have been developed without the contributions of scientists, such as mathematicians, physicists, and chemists supported by the agencies currently at risk.

Although this statement was made 3 years ago, it is still true today for the Department of Energy Office of Science.

The fundamental work in high energy and nuclear physics has led to a revolution in medicine. Our quality of life has been greatly improved with the advent of nuclear medicine. As President Bush recently acknowledged, one of every three hospital patients benefits from nuclear medicine. None of this would have been possible without the fundamental research of physicists in the last century and today, physicists who have been supported in large part by the Department of Energy and its predecessors.

Advances in magnetic resonance imaging—we call it MRIs in everyday language—could not have been possible without the development of superconductors. Small electron linear accelerators are used in hospitals every day to treat cancer patients. Yet this would not have been possible without our investments in science.

Likewise, the development of laser and optics technology has led to a revolution in medical procedures. Surgeries, such as gall bladder removal, that were once invasive and required weeks of recovery, can now be performed with a minimal incision and require minimal recovery time. None of this would have been possible without the basic research performed by scientists at our research universities and National Laboratories funded by our Federal investments in science and technology.

We are advancing even further than once imagined, thanks to these investments in science. The Department of Energy is leading the way in developing materials for creating the artificial retina. The development of an artificial retina requires new and innovative materials, research, and nanoscale fabrication techniques that are on the forefront of science.

Preliminary models of the artificial retina have enabled patients to see for the first time. I saw some of that research being done at Oak Ridge. Although these patients did not regain full sight, this is just the beginning. This research caused three patients to see for the first time. With advancements in materials and fabrication techniques, sight may eventually be re-

turned to those who cannot see. This is truly amazing. We are just at the edge of what science can do.

The physical science and engineering will also play a major role in advancing technology for homeland security. The development of detection systems for chemical, biological, radiological, and nuclear weapons will require investments in science and technology. Crisis response technologies and analyses will also be dependent on science and engineering. The daunting challenges of developing countermeasures for chemical, biological, radiological, and nuclear weapons will be addressed in large part by the development and application of our scientific capabilities. Our Nation has no choice. We must invest heavily in physical sciences and engineering to stay competitive in these fields. Our competitiveness is greatly impacted by the number of graduate students entering these fields.

A definite correlation exists between the number of graduate students enrolled in science and engineering and the funding levels for these fields. The funding levels for the medical sciences have increased more than 20 percent over the past decade, and graduate student enrollment has increased more than 40 percent. However, there were 20 percent fewer graduate students in physics and 9 percent fewer in chemistry in 2000 than in 1993 while the mathematical sciences had 19 percent fewer graduate students. These trends cannot be allowed to continue.

Science and technology are an integral part of our everyday lives. To sustain our Nation's technical and scientific leadership, we must support increased authorizations for our science programs. The Energy bill reported out of conference will help put our Nation on the path to sustained economic growth. But the Energy bill is not just investing in science; it is investing in jobs.

The quality of our lives and the prosperity of our Nation will be greatly enhanced and made better if we agree over the next 5 years to do for the physical sciences what we have done for the health sciences—double our spending—according to the visionary plan that the Secretary of Energy laid out for the next 20 years.

Thank you, Mr. President. I yield the floor.

SPECIAL BIRTHDAYS

Mr. BURNS. Mr. President, this is a special day today. I just want to take note of it now. It is a special day, the birthday of someone Americans all know. He is one of our senior citizens who has his birthday today. When this animated character burst on the scene, it changed our country. That change was bound to happen because of his appeal to the young and the old. He has changed the way we communicate. He has changed the way we travel.

He is just a little fellow, but size has meant nothing to this animated char-

acter. He has always held that it is not the size of the dog in the fight but the size of the fight in the dog.

He has changed our attitude on how we solve our problems and most times taught us to laugh at ourselves and lighten up on ourselves. He has entered our lives and he has changed us all, from the young to the old.

Today is the birthday of Mickey Mouse. It is also shared by our good friend, the President pro tempore now in the chair, Chairman STEVENS.

I yield the floor.

HONORING OUR ARMED FORCES

Mr. JOHNSON. Mr. President, I rise today to pay tribute to Chief Warrant Officer Two Scott A. Saboe, a resident of Willow Lake, SD, who died on November 15, 2003, while serving in Operation Iraqi Freedom.

Chief Warrant Officer Two Saboe, a member of A Company, 4th Battalion, 101st Aviation Regiment, 101st Airborne Division, was based out of Fort Campbell, KY. He was among 17 soldiers killed when two Army Black Hawk helicopters collided midair in the northern Iraq city of Mosul.

Answering America's call to the military, Chief Warrant Officer Two Saboe had planned a military career since attending high school at Willow Lake, SD. A member of the football, basketball, and track teams, friends remember him as a serious and committed person. Chief Warrant Officer Two Saboe's former coach and teacher Bill Stobbs said that "he died doing what he loved, and he was a dedicated soldier." His childhood friend, Darin Michalski, knew that "he was giving his all and believing in what he was doing."

For all of Chief Warrant Officer Two Saboe's commitment to public service, nothing was more important than his family. The 33-year-old leaves behind his wife Franceska and 6-year-old son, Dustin, as well as his sister Ann Remington, who is stationed at Walter Reed Medical Center in Bethesda, MD. He also leaves behind his father, Arlo Saboe, a decorated Vietnam war veteran, in addition to his proud, extended family and countless friends.

Chief Warrant Officer Two Saboe served our country and, as a hero, died fighting for it. He served as a model example of the loyalty and dedication in the preservation of freedom. The thoughts and prayers of my family as well as the rest of the country's are with his family during this time of mourning. Our thoughts continue to be with all those families with children, spouses, and loved ones serving overseas.

Chief Warrant Officer Two Saboe led a full life, committed to his family, his Nation, and his community. It is his incredible dedication to helping others that will serve as his greatest legacy. Our Nation is a far better place because of Chief Warrant Officer Two Saboe's life, and, while his family, friends, and